

# National Oceanographic Data Center CD-ROM DATA SETS

User Services NOAA's National Data Centers National Oceanographic Data Center Silver Spring, MD

January 2004





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Environmental Satellite, Data and Information Service
National Oceanographic Data Center

NODC Environmental Information Bulletin 93-2 (Revised)

#### **HOW TO ORDER NODC PRODUCTS**

This flier lists all CD-ROM data products available from the National Oceanographic Data Center (NODC). The last page provides a current price list for all the ocean data CD-ROM products described here. Please note the shipping/handling charges described at the bottom of the price list and add to the final cost. Please also note that, while NODC can accept credit card orders directly, orders containing checks or money orders must be mailed to the NNDC Fiscal Group address (next column.)

Prepayment is required for non-Federal customers and may be made by:

- Check or money order (in U.S. dollars drawn on a U.S. bank and made payable to the "NOAA National Data Centers")
- Credit card (Visa, Master Card, American Express or Discover)

A two-tier pricing schedule is in effect. For orders submitted by mail, e-mail, telephone or fax, customers in the United States affiliated with government agencies, universities, or other non-profit organizations are eligible to receive products at the discount price. *All* customers are eligible to receive products at the discount prices if ordered online via the NNDC online store. Therefore, online ordering provides convenience and savings for customers in the business and commercial sectors, as well as customers outside of the United States.

#### **ORDER ONLINE**

CD-ROM's and other data products and services of the NODC and the other NOAA National Data Centers can be ordered via the Internet through the NOAA National Data Centers' Online Store. This secure system allows customers to provide their credit card information to order products online. Please note that prices for products ordered online are the discount prices normally available only to customers in the United States affiliated with government agencies, universities, and other non-profit organizations.

The NOAA National Data Centers Online Store may be accessed via the NODC web site at: http://www.nodc.noaa.gov/

#### **BY PHONE**

Telephone orders should be directed to: 301-713-3277

#### BY E-MAIL

Send your e-mail orders to: NODC.services@noaa.gov

#### **BY FAX**

Orders may be faxed to: 301-713-3302

#### **BY MAIL**

#### • Credit Card orders:

National Oceanographic Data Center NOAA/NESDIS E/OC1 SSMC-3, Fourth Floor 1315 East-West Highway Silver Spring, MD 20910-3282

#### • All other orders:

NOAA's National Data Centers Attn.: Fiscal Group 151 Patton Avenue Asheville, NC 28801

#### **CUSTOM DATA SETS ON CD-ROM**

The NODC is also able to provide customers with data selected from its archive data files on recordable CD-ROMs. Because a CD-ROM can hold up to 650 megabytes of data, there is substantial cost savings when large data sets are provided on a single CD-ROM versus multiple tapes or diskettes.

#### **NODC CD-ROM DATA SETS**

•World Ocean Database 2001 Data Sets. The Ocean Climate Laboratory (OCL) of NOAA's National Oceanographic Data Center (NODC) has completed another update of previous releases of global oceanographic data. World Ocean Database 2001 (WOD01) expands on World Ocean Database 1998 (WOD98) and World Ocean Atlas 1994 (WOA94) to include data from new instrument types such as profiling floats and new variables such as pCO<sub>2</sub> and tCO<sub>2</sub>.

The WOD02 is comprised of eight CD-ROMs containing the updated observed and standard profile and plankton/biomass data:

- Disc 1 Ocean Station & Surface Data (Observed Depth Data)
- Disc 2 North Atlantic 0°-90° (Observed Depth Data) Undulating Oceanographic Recorder)
- Disc 3 North Pacific 0°-90° (Observed Depth Data) Conductivity, Temperature, Depth Probe; Undulating Oceanographic Recorder)
- Disc 4 Southern Hemisphere, Indian Ocean (Observed Depth Data) (Conductivity, Temperature, Depth Probe; Undulating Oceanographic Recorder)
- Disc 5 North Atlantic 0°-90° (Observed Depth Data)
   (XBT; MBT; Autonomous Pinniped BT;
   Moored Buoy; Profiling Float; Drifting Buoy)
- Disc 6 North Pacific 0°-90° (Observed Depth Data) (XBT; MBT; Autonomous Pinniped BT; Moored Buoy; Profiling Float; Drifting Buoy)
- Disc 7 Southern Hemisphere, Indian Ocean (Observed Depth Data) (XBT; MBT; Autonomous Pinniped BT; Moored Buoy; Profiling Float; Drifting Buoy)
- Disc 8 All Instrument Types (Standard Depth Data) *WOD01*, 8 *discs*
- •World Ocean Atlas 2001. All of the objectively analyzed fields and statistics, based on the World Ocean Database 2001, are available on CD-ROM or in publication form. The World Ocean Atlas 2001 consists of 3 CD-ROMS containing:
  - >statistics of observed (vertically interpolated) unanalyzed data for 1° and 5° squares at standard depth levels. Statistics for each grid include number of observations, mean, standard deviation, and standard error of the mean.
  - ➤annual, seasonal and monthly objectively analyzed mean fields by 1° squares at standard depth levels
  - ➤ "interpolation error" of the objectively analyzed fields (fields of observed means minus annual objectively analyzed mean by 1° squares at standard depth levels.)
  - > seasonal and monthly objectively analyzed fields

- minus annual mean objectively analyzed fields by 1° squares at standard depth levels
- ➤ land/ocean-bottom mask used in the analyses at standard depth levels
- definition of basins used in the objective analyses at standard depth levels
- Disc 1 Temperature and Salinity
- Disc 2 Oxygen
- Disc 3 Nutrients and Chlorophyll

WOA01 - 3 discs (also available in publication form)

- The **World Ocean Atlas 2001 Figures**. The thousands of figures created to display the WOA01 analyses are available on a set of 3 DVD's. These discs contain the JPEG and PDF images of objectively analyzed fields of temperature, salinity, dissolved oxygen, derived oxygen variables (Apparent Oxygen Utilization and oxygen saturation), nutrients (phosphate, nitrate and silicate) and chlorophyll, as well as figures of various statistics for these variables.
- Disc 1 Temperature & Salinity
- Disc 2 -Oxygen
- Disc 3 -Nutrients, Chlorophyll and Plankton• Disc 1 Temperature & Salinity
- Disc 2 -Oxygen
- Disc 3 -Nutrients, Chlorophyll and Plankton
- Disc 1 Temperature & Salinity
- Disc 2 -Oxygen
- Disc 3 -Nutrients, Chlorophyll and Plankton

#### WOAF01 - 3 discs

- International Ocean Atlas Series. A series of international atlases is being coordinated by the World Ocean Data Center for Oceanography as part of the UNESCO IOC GODAR (Global Oceanographic Data Archaeology and Rescue) project. Eight atlases are currently available:
- Volume 1. *Climatic Atlas of the Barents Sea 1998: Temperature, Salinity, Oxygen*. Time series and monthly climatology data collected from 74,256 ocean stations between 1898-1993 are provided in a format conducive to use with spreadsheets or databases.
- Volume 2. *Biological Atlas of the Arctic Seas 2000: Plankton of the Barents and Kara Seas.* Data collected between 1913-1999 (158 cruises, 4,608 stations, 13,356 plankton samples) includes distribution patterns of physical and biological variables; a list of plankton taxa of the Arctic Seas; and phytoplankton photos.
- Volume 3. *Hydrochemical Atlas of the Sea of Okhotsk* 2001. Includes temperature, salinity, oxygen, percent oxygen saturation, and nutrient data for the Sea of Okhotsk between 1992-1997 (422 profiles, 10 variables)
- Volume 4. Atlas of Temperature-Salinity Frequency

Distributions: North Atlantic Ocean. Contains over 80,000 plots of empirical distributions of temperature and salinity for the North Atlantic Ocean in 5 degree squares. This two-disk set shows seasonal distributions for all standard levels from 0-400m (disk 1) and annual distributions for the deeper 500-5500m standard levels (disk 2.)

- Volume 5. Russian Marine Expeditionary Investigations of the World Ocean (Online only)
- Volume 6. *Zooplankton of the Arctic Seas 2002*. Physical and biological data for the Arctic and sub-Arctic regions extending from the Barents Sea to the Northwest Pacific, sampled during 25 scientific cruises for the period of 1903-1956.
- Volume 7. 36-Year Time Series (1963-1998) of Zooplankton, Temperature, and Salinity in the White Sea. Raw data for temperature & salinity measurements between 1961-1999; zooplankton collection data from 1963 to 1998. (Publication/CD-ROM set only)
- Volume 8. History of the Arctic Exploration 2003: Cruise Reports, Data. 1870 to 1941 oceanographic observations in the Eastern Arctic seas provided in electronic form for use in the studies of the World Ocean IOA Series, 7 discs (Most are also available in publication form, and all are available online)
- World Ocean Circulation Experiment (WOCE) Global Data Version 3.0 2002. The World Ocean Circulation Experiment of the World Climate Research Programme is dedicated to providing improvements in the ocean circulation models used in climate prediction. Resources and expertise from nearly 30 countries have been combined to produce unprecedented in-situ and satellite observations of the global oceans between 1990-1998. In accordance with the WOCE data sharing policy, this Global Data Version 3.0 DVD set makes available a unique and incredibly diverse set of data, which will assist climate researchers and marine scientists in unraveling many important, but still poorly understood, physical processes. This set of 2 discs consists of:
- Disc 1 Data Information Unit
- Air Sea Fluxes
- Current Meter Moorings
- Drifters (Surface Velocity Program)
- Hydrography
- Profiling Floats
- Sea Surface Salinity
- Shipboard ADCP
- Subsurface Floats
- Surface Meteorology
- Upper Ocean Thermal
- Disc 2 Data Information Unit
- Bathymetry
- In situ Sea Level (Fast Delivery)
- In situ Sea Level(Delayed Mode)

- Satellite Data Sea Surface Temperature
- Satellite Data Sea Surface Height
- Satellite Data Sea Surface Winds
- eWoce: Electronic Atlas of WOCE Data **WOCE 2002, 2 DVD set.**

## • Gulf of Mexico Hydrographic and Marine

**Mammal Data.** This CD-ROM was produced in cooperation with the Texas A&M University (TAMU), Department of Oceanography. It includes hydrographic and marine mammal sighting data for the Gulf of Mexico. The marine mammal data is from the GulfCet Program sponsored by the U.S. Minerals Management Service and headquartered at the TAMU Galveston Campus.

The files on this CD-ROM are divided into two data groups: TAMU\_GULFCET and TAMU\_OCEANOGRA-PHY. The TAMU\_GULFCET hydrographic data were collected in 1992\_1993 by researchers from the Texas Institute of Oceanography and TAMU\_Galveston during the course of a field program to study the distribution and abundance of cetaceans (whales and dolphins) in the north\_central and western Gulf of Mexico. The GULFCET\MAMMALS files contain cetacean sighting data from eight seasonal aerial surveys, four spring ship surveys conducted by the NOAA National Marine Fisheries Service, and seven TAMU ship surveys.

The TAMU\_OCEANOGRAPHY hydrographic data were collected over a broader area of the Gulf of Mexico during the period 1987\_1995. The data have been drawn together from 46 cruises over the 9\_year period and consist of CTD, XBT, and bottle data as well as some processed data parameters such as dynamic height and splined XBT data. *GoMex, 1 disc* 

• NSWC Moored ADCP Data 1994-1995. This database contains Acoustic Doppler Current Profiler (ADCP) data collected during 1994-1995 on the eastern shelf of Florida. The data were collected at 10-minute intervals by a bottom mounted 300-KHz ADCP unit (from RD Instruments, San Diego, Calif.) which was set offshore from Fort Lauderdale, Florida at a depth of 140 meters. The instrument is positioned at approximately 26 04.0' N by 80 03.5' W. This unit is supported by the United States Naval Surface Warfare Center (NSWC), which receives data directly from the ADCP by way of a submerged cable. Following negotiations in 1993, a cooperative effort was established between the National Oceanic and Atmospheric Administration (NOAA) and the NSWC to forward the ADCP data collected by NSWC to the NOAA Atlantic Oceanographic and Meteorological Laboratory (AOML) in Miami, Florida. Since April 1994, AOML has been receiving the data from NSWC.

This CD-ROM contains six subdirectories: BINARY, ASC, FLT, FLTDAILY, PLOTS, PGMS, and README.

The BINARY subdirectory contains the original ADCP files as received from NSWC. The ASC subdirectory contains corresponding processed ADCP files in an ASCII format. The FLT subdirectory contains the ADCP data in a format processed to give north-south and east-west velocities at each bin depth. The PLOTS subdirectory contains the velocities found in the flat files projected as color Hovmueller plots in GIF format. The README subdirectory contains the documentation files, and the PGMS subdirectory contains sample FORTRAN programs that can be used to analyze the data.

NSWC ADCP Data, 1 disc

• Atlas of Surface Marine Data 1994. This set of nine CD-ROMs contains raw and objectively analyzed fields of surface marine anomalies of fluxes of heat, momentum, and fresh water along with other parameters of interest. These revised monthly mean fields are derived from individual observations in the Comprehensive Ocean\_Atmosphere Data Set (COADS Release 1 and an interim release for the 1980's) from January 1945 to December 1989, and are analyzed on a 1-degree by 1-degree global grid.

Corrections have been made to reduce wind speed bias associated with an erroneous Beaufort equivalent scale, to quality control night-time fractional cloud cover observations according to the brightness of the sky, to consider weather-associated "sky obscured" cloudiness observations as valid observations of 100% cloud cover, and to correct for erroneously missing "clear" present weather observations after 1981.

The data are in Unidata's NetCDF format. User friendly access subroutines in FORTRAN are included on the CD-ROMs for those unfamiliar with NetCDF.

This set of 9 discs contain the following data:

- Disc 1 Directly observed quantities and number of observations
- Disc 2 Heat, momentum, and fresh water fluxes
- Disc 3 Miscellaneous derived quantities
- Disc 4 Heat flux sensitivity to sea surface tempera-
- Disc 5 Anomalies of observed and surface flux quantities for 1990-1993
- Disc 6 0.5 x 0.5 degree analysis: Monthly Climatology
- Disc 7 0.5 x 0.5 degree analysis: Weekly Climatology
- Disc 8 0.5 x 0.5 degree analysis: Weekly Climatology
- Disc 9 0.5 x 0.5 degree analysis: Weekly Climatology *ASMD 1994, 9 discs*
- Ocean Current Drifter Data. The CD-ROMs issued in this series hold the Surface Current (Ship Drift) Data Archive obtained by the NODC from the U.S. Naval Oceanographic Office and the World Ocean Circulation Experiment (WOCE) Subsurface Float Data released by

the WOCE Subsurface Float Data Assembly Center located at the Woods Hole Oceanographic Institution.

Disc 1 of this set holds both the surface current (ship drift) data and the subsurface float data. The surface current (ship drift) data file contains over 4 million surface current observations, almost all of which were collected by the ship drift method. Date, data source, position, and current direction and speed are recorded for each observation. The subsurface float data set consists primarily of SOFAR (Sound Fixing and Ranging) and RAFOS (SOFAR spelled backwards) float trajectories. These floats are ballasted for a target depth and acoustically tracked. Some recently released ALACE (Autonomous Lagrangian Circulation Explorer) float trajectories are also included with this float data set. ALACE is a subsurface float that cycles vertically from a depth where it is neutrally buoyant to the surface where it is located by, and relays data to, System Argos satellites. The subsurface float data has approximately 475 float trajectories and 432 float-years of data, mostly from the North Atlantic Ocean.

Disc 2 holds surface current data summaries in the NODC Surface Current (Ship Drift) Long Summary format. The data are summarized by ten-degree square, one-degree square, and month for all years. For specified one-degree squares and months, the summaries provide:

- total number of observations,
- number of calms,
- resultant current direction and speed,
- north and east current components, and
- a statistical distribution and analysis of observations by 15 speed classes and eight compass directions.

OCDD, 2 discs

• Sea Level Data. The data on this CD-ROM are provided in two main directories. One directory contains Tropical Ocean-Global Atmosphere (TOGA) project sea level data, file formats, and associated documentation. The other main directory contains the Permanent Service for Mean Sea Level (PSMSL) data, documentation, and a few related data sets.

The TOGA sea level data is managed by the TOGA Sea Level Center at the University of Hawaii in cooperation with the NODC through the Joint Archive for Sea Level. This archive holds hourly, daily, and monthly sea level values in standard formats from 289 sea level stations in the Pacific, Atlantic, and Indian Oceans. These data are collected in support of the TOGA project and are primarily in the tropical ocean areas of TOGA interest (30 N-30 S). This CD-ROM contains the TOGA sea level holdings as of July 1994, as well as quality assessments and an inventory list of all stations that includes geographic positions and data time spans.

The Permanent Service for Mean Sea Level is based at the Proudman Oceanographic Laboratory, Bidston

Observatory, United Kingdom, and the PSMSL data set contains monthly and annual mean values of sea level from approximately 1500 tide gauge stations around the world. Other related data sets are also included such as the IAPSO (International Association for the Physical Sciences of the Ocean) Tidal constants data set and the Revised Local Reference annual mean values. This CD-ROM holds the PSMSL data holdings as of August 1994. *Sea Level Data, 1 disc* 

• GEOSAT Altimeter Data: Enhanced JGM\_3 Geophysical Data Records. This set of 10 CD-ROMs contains improved geophysical data records (GDR's) from the U.S. Navy Geodetic Satellite (GEOSAT). The data span both the Geodetic Mission (GM, March 1985\_September 1986) and the Exact Repeat Mission (ERM, November 1986-December 1989). The GM data were initially classified, but in 1995 were released by the Navy and distributed by NODC on CD-ROM. These GM GDR's were based on the original Naval Surface Weapons Center orbit. The ERM data have always been unclassified and were last issued on CD-ROM in 1991. These "T2" GDR's were based on orbits computed using the GEM-T2 gravity model.

For this 1997 release, a new satellite ephemeris has been computed by NASA's Goddard Space Flight Center using the JGM-3 gravity model. The JGM-3 orbits reduce the radial orbit error (nearly 1 meter during the GM and about 50 cm during the ERM) to the 10\_15 cm level over the first 3.5 years of the mission. In addition, these new GDR's contain the following enhanced geophysical corrections that significantly increase the overall accuracy of the data: CSR 3.0 tides; model troposphere corrections from the NCEP/ NCAR reanalysis; IRI95 ionosphere corrections; and a new sea state bias correction based on wind, wave, and satellite attitude.

The GDR's are stored in daily files in chronological order through the Geodetic and Exact Repeat Missions. The data are in the same 78\_byte integer binary format as previous releases of the GEOSAT GDR's. Disc 1 (first disc holding the GM data) and Disc 5 (first disc holding the ERM data) contain documentation, tabular data, "high-precision" corrections, figures, and the CD-ROM Handbook, which can be viewed using standard Web browsers. More extensive documentation and analyses are available in the Online Handbook, which is a "living" document on the Web.

The data can be ordered in three ways: the complete set of 10 discs holding both the Geodetic and Exact Repeat Mission data; the four discs (nos. 1-4) holding only the Geodetic Mission data; or the six discs (nos. 5-10) holding only the Exact Repeat Mission data.

GEOSAT JGM-3 GDR's, 10 discs

- GEOSAT Global Wind/Wave Data. This CDROM holds global wind/wave data derived from altimeter data collected during the Geodetic Mission of the U.S. Navy Geodetic Satellite (GEOSAT). The data span the period from March 31, 1985 through September 30, 1986. The Navy released the radar backscatter (from which wind speed is derived) and the significant wave height data. This disc holds these data and includes two wind speed fields that were computed using different algorithms. The README file on this disc also provides three additional wind speed algorithms proposed since 1988 and a bibliography that includes references to papers that discuss the algorithm used to compute significant wave height. The wind/wave data are recorded as 26-byte binary records. GEOSAT Wind/Wave, 1 disc
- GEOSAT Altimeter Crossover Differences from the Geodetic Mission. The first 18 months of GEOSAT operations (April 1985 to September 1986) were referred to as the Geodetic Mission. The altimeter crossover differences from the Geodetic Mission are contained on this set of eight CD-ROMs in the form of crossover difference records (XDR's). XDR's were constructed for the first 2.5 years of the GEOSAT mission, that is, data from the Geodetic Mission plus the first year of the Exact Repeat Mission. This was done to minimize the effect of the 5 week data gap (October 1 to November 8, 1986) between the two missions. The data are in a binary Hewlett-Packard format, but each disc contains a module that enables the data to be converted to binary VAX format. The GEOSAT altimeter crossover difference records are documented in a NOAA handbook, a copy of which is provided with each order. GEOSAT GM Crossover, 8 discs

#### • NOAA Marine Environmental Buoy Database.

These CD-ROMs hold marine meteorological, oceanographic, and wave spectra data collected by moored buoys and C-MAN (Coastal-Marine Automated Network) stations operated by the NOAA National Data Buoy Center (NDBC). C-MAN stations are located at coastal and near-shore sites on piers, offshore towers, lighthouses, and beaches. The NDBC buoys began reporting in the early 1970's and the NODC archive holds data from February 1970. The first C-MAN stations became operational in March 1983, and the NODC archive of C-MAN data begins in 1985.

Principal measured parameters reported by both moored buoys and C-MAN stations include air temperature and pressure, wind speed and direction, wind gust, and sea surface temperature. The buoys (and a few C-MAN stations located on offshore platforms) also report wave data, which usually include wave height, wave period, and wave spectra. Since the late 1980's, some buoys have reported directional wave spectra. Data files for each buoy or

C-MAN station are arranged chronologically in directories by their station identifier. Each file contains data for one month for that buoy or station.

The recent release of interactive CD-ROM's contains all the NOAA National Data Buoy Center buoy data archived at the NODC through December of 1997. These data are compressed, flat ASCII files, stored in monthly segments in the NODC F291 file format. The CD-ROM's are html compatible and, with an Internet browser, options exist for locating and viewing the data, and for gathering information on buoy locations, period of record, data availability, etc. Hyperlinks are also included for obtaining archived data stored since December 1997, and for realtime data access at the National Buoy Data Center. Access is not limited to use with an Internet browser, however. Files may be easily located on the CD-ROM and downloaded directly to a PC or unix system. Detailed instructions and decompression software are included on each CD-ROM to support this option.

Data on the CD-ROMs are separated by ocean areas as follows:

- Disc 1 Upper North Atlantic
- Disc 2 Mid- and lower North Atlantic
- Disc 3 Gulf of Mexico
- Disc 4 Great Lakes
- Disc 5 Lower Eastern and U.S. Pacific Coast
- Disc 6 Upper Eastern Pacific
- Disc 7 Alaska, Hawaii and other Pacific buoys Buoy Webdiscs - 7 discs

• Louisiana-Texas Shelf Physical Oceanography Program (LATEX-A). LATEX-A data were collected from the Mississippi River to the Rio Grand between April 1992 and December 1994 to build a baseline for understanding the Gulf of Mexico shelf circulation and transport processes. During this field phase, instruments recording horizontal ocean current, temperature and conductivity were maintained on an array of 33 moorings. The LATEX mooring instrumentation consisted of 81 current meters measuring current speed and direction. temperature and conductivity; five direction wave gauges measuring current speed and direction, temperature and pressure; and one inverted echo sounder measuring acoustic travel time and bottom temperature and pressure. Eight moored meteorological buoys measured wind speed and direction, air and sea surface temperature and barometric pressure. Sixteen free-drifting buoys provided information on their locations and sea surface temperature via satellite. Ten hydrographic/ADCP surveys were conducted, with continuous ADCP measurements taken along the cruise track. At each hydrographic sampling station, continuous profiles were made of conductivity, temperature, dissolved oxygen, downwelling irradiance, particle scattering, fluorescence, and beam attenuation. Up to 12 water samples were analyzed for dissolved oxygen salinity, phytoplankton, silicate, urea and ammonium. Water samples were analyzed for dissolved oxygen, salinity, phytoplankton pigments, and surface and bottom particulate matter concentrations. Secchi disk depths were taken at each daylight station.

LATEX-A, 5 discs

# **NODC CD-ROM Products**

## Price List (January 2004)

U.S. academic institutions, government agencies, and other nonprofit organizations are entitled to receive a discount of approximately 25% off regular prices for their data orders. This price list gives both the retail and discount prices for NODC CD-ROM products.

Atlas of Surface Marine Data 1994:	Standard/Discount		
Individual Disks	·	\$ 75	
Complete set (9 discs)	\$900	\$675	
Geosat Altimeter Data: Enhanced JGM_3 Geophysical Data Records Data from the Geodetic Mission (1985_86, 4 discs) Data from the Exact Repeat Mission (1986_89, 6 discs) Complete set (10 discs)	\$400 \$600	\$300 \$450 \$750	
Geosat Altimeter Crossover Differences			
Individual discs Complete set (8 discs)		\$ 75 \$600	
Geosat Global Wind/Wave Data (1 disc)	\$175	\$130	
Gulf of Mexico Hydrographic and Marine Mammal Data (1 disc)	\$100	\$ 75	
International Oceanographic Atlas Series (Vol. 1-4,6)			
Individual discs International Oceanographic Atlas Series (Vol 7 Publication/CD	\$ 22 set) \$ 42		
Louisiana-Texas Shelf Physical Oceanography Program (LATEX-A): Individual discs Complete set (5 discs)	\$100 \$500	\$75 \$375	
NOAA Marine Environmental Buoy Webdiscs Individual discs Complete set (7 discs)		\$ 75 \$525	
NSWC Moored ADCP Data 1994-1995 (1 disc)	\$100	\$ 75	
Ocean Current Drifter Data: Individual discs Complete set (2 discs)		\$ 75 \$150	
Sea Level Data (1 disc)	\$100	\$ 75	
World Ocean Atlas 2001 Analyzed Fields & Statistics Individual discs Complete set (3 discs)		\$ 17 \$ 51	
World Ocean Atlas 2001 Figures (DVD) Individual discs Complete set (3 discs)	\$ 34 \$102	\$ 26 \$ 78	
World Ocean Circulation Experiment (WOCE) Global Data Version : Individual discs Complete DVD set(2 discs)		\$ 7 \$ 21	
World Ocean Database 2001 Data Sets: Individual discs Complete set (8 discs)	•	\$ 17 \$136	

**Handling /Shipping Charges:** To determine total charge per order, determine subtotal of items ordered and add:

- Service and handling: Orders less than \$50, add \$5; orders greater than or equal to \$50, add \$11.
- Foreign shipping/handling surcharge: For orders shipped to non-U.S. address, add \$10 if subtotal is less than \$100. If over \$100, please add \$20.
- Overnight rush surcharge: For overnight shipment by express package service, add \$100 (\$75 for U.S. academic institutions, government agencies, and other nonprofit organizations).

#### **Payment Procedures:** Payment for NODC data products may be made by:

• Check or money order (in U.S. dollars drawn on a bank in the United States and made payable to: "NOAA National Data Centers-NODC". Checks must also contain your banks' 9-digit ABA (American Banking Association) routing and transit number.)

Mail checks to: NOAA National Data Centers

Attn.: Fiscal Group 151 Patton Avenue Asheville, NC 28801

- Credit card (Visa, MasterCard, American Express or Discover)
- Foreign wires should be sent directly to First Chicago NBD, routing transit code 0710-00013, with credit to DDA #11-71542 (NOAA National Data Centers). *You must add an additional \$15 to your order to cover the bank's service charge*.

#### Orders and inquiries should be directed to:

National Oceanographic Data Center User Services NOAA/NESDIS E/OC1 SSMC3, 4th Floor 1315 East-West Highway Silver Spring, MD 20910-3282

- TELEPHONE: 301-713-3277 FAX: 301-713-3302 E-MAIL: NODC.services@noaa.gov
- Order online and save at the *NOAA National Data Centers Online Store* on the NODC World Wide Web site at *http://www.nodc.noaa.gov/*

# **NATIONAL OCEANOGRAPHIC DATA CENTER**

Please specify requested products in the section below, entering quantities and total amount for each item ordered. Enter subtotal of items ordered and add shipping and handling charges as specified. Enter total amount due and complete shipping and payment information on the reverse side.

## **Data Product Selection**

ITEM	Unit Price	Quan.	Total
SUBTOTAL			
Service and handling: Order less than \$50, add \$5; order greater than or equal to \$50, add \$11:			
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<i>Overnight rush surcharge:</i> For overnight delivery by express package service, add \$100 (\$75 for U.S. academic institutions, government agencies, and other non-profit organizations):			
TOTAL PAYMENT (thank you!)			

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